Background for translation of 1997 mathematics education standards in Wisconsin Groundwater Study Guide to 2011 Common Core State Standards for Mathematics
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Activity	Common Core State Standards for Mathematics
Porosity and Permeability	3.MD.2, 3.MD.3, HS.S-IC
It'll Go With the Flow	7.EE.3, HS.S-IC
Wisconsin's Major Aquifers	7.G.1

Old standards are in italics

3.MD.2: Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).

D.8.3 Determine measurement directly using standard units (metric and US Customary) with these suggested degrees of accuracy*
• lengths to the nearest mm or 1/16 of an inch
• weight (mass) to the nearest 0.1 g or 0.5 ounce
• liquid capacity to the nearest milliliter

3.MD.3: Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.

E.8.2 Organize and display data from statistical investigations using appropriate tables, graphs, and/or charts (e.g., circle, bar, or line for multiple sets of data)

7.G.1: Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing, and reproducing a scale drawing at a different scale.

D.8.4 Determine measurements indirectly using… ratio and proportion (e.g., similarity*, scale drawings**

7.EE.3: Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically.

HS.S-IC: Make inferences and justify conclusions from sample surveys, experiments, and observational studies.

E.8.4 Use the results of data analysis to
• make predictions
• develop convincing arguments
• draw conclusions

E.8.5 Compare several sets of data to generate, test, and, as the data dictate, confirm or deny hypotheses